

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A laser interferometer displacement measuring system, comprising:

a laser light source;

an interferometer for dividing laser light of wavelength λ emitted from said laser light source into a reference path beam and a measurement path beam to interfere said reference path beam with the measurement path beam having been reflected from a subject body; and

a light detector for detecting the light subjected to the interference in said interferometer, in which a variation in length of an optical path of the measurement path beam caused by a movement of the subject body is n (a natural number) times a displacement of the subject body; and

~~said laser interferometer displacement measuring system further comprising~~
means for suppressing a relative peak intensity, with respect to a baseline of a frequency spectrum, of a peak of frequency component $f = Nv/\lambda$ (N is a natural number of 1 to $2n$ and not equal to n) of a signal indicative of the amount of received light, the signal being generated in said light detector due to a movement of said subject body at speed v .

2. (currently amended) A laser interferometer displacement measuring system, comprising:

a laser light source;

an interferometer for dividing laser light of wavelength λ emitted from said laser light source into a reference path beam and a measurement path beam to interfere said reference path beam with the measurement path beam having been reflected from a subject body; and

a light detector for detecting the light subjected to the interference in said interferometer, in which a variation in length of an optical path of the measurement path beam caused by a movement of the subject body is n (a natural number) times a displacement of the subject body,

~~said laser interferometer displacement measuring system wherein~~

wherein a relative peak intensity, with respect to a baseline of a frequency spectrum, of a peak of frequency component $f = Nv/\lambda$ (N is a natural number of 1 to $2n$ and not equal to n) of a signal indicative of the amount of received light, the signal being generated in said light detector due to a movement of said subject body at speed v , is suppressed for output relative to said signal indicative of the amount of received light in a frequency spectrum of a signal of a measurement value.